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UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 8

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08-948

IN THE MATTER OF:
Omaha & Grant Smelter Location
(On-Site Soils Operable Unit 2)
Vasquez Boulevard/Interstate 70 Superfund Site

ADMINISTRATIVE
SETTLEMENT AGREEMENT
AND ORDER ON CONSENT FOR
REMEDIAL INVESTIGATION/
FEASIBILITY STUDY

Denver, Colorado

U.S. EPA Region 8
CERCLA Docket No. CERCLA-08-2008-0011

City and County of Denver, CO,

Proceeding Under Sections 104, 107
and 122 of the Comprehensive
Environmental Response,
Compensation, and Liability Act, as
amended, 42 U.S.C. §§ 9604, 9607
and 9622.

Respondent

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT

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Exhibit A: Map of Site: Operable Unit 2 of VB/I70 site

Exhibit B: Map of the VB/I70 Superfund site: Operable Units 1, 2 and 3.

Exhibit C: Statement of Work, Remedial Investigation/Feasibility Study, Omaha & Grant
Smelter Location (On-Facility Soils Operable Unit 2), Vasquez Boulevard/I70 Superfund Site,
October 2007

ADMINISTRATIVE SETTLEMENT AGREEMENT AND
ORDER ON CONSENT
FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Omaha & Grant Smelter Location
(On-Site Soils Operable Unit 2)
Vasquez Boulevard/Interstate 70 Superfund Site

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and the City and County of Denver, Colorado, ("Respondent"), collectively the "Parties". The Settlement Agreement concerns the preparation and performance of a remedial investigation and a feasibility study ("RI/FS") for the former Omaha & Grant Smelter location, Operable Unit 2 of the Vasquez Boulevard/Interstate 70 ("I-70") (VB/I70) Superfund site located in Denver, Colorado near 42nd Avenue and St. Vincent Street, south of Interstate 70 and the existing Denver Coliseum and the reimbursement for response costs incurred by EPA in connection with the RI/FS.

2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9607 and 9622 ("CERCLA"). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2926 (Jan. 29, 1987), and further delegated to Regional Administrators on May 11, 1994, by EPA Delegation Nos. 14-14-C. This authority was further redelegated by the Regional Administrator of EPA Region 8 to the Director, Superfund Remedial Response Program, Office of Ecosystems Protection and Remediation by delegation dated May 28, 1997.

3. In accordance with Section 104(b)(2) and 122(j)(1) of CERCLA, 42 U.S.C. §§ 9604(b)(2) and 9622(j)(1), EPA notified the Federal and/or State natural resource trustees on December 14, 2000 and March 25, 2008, of negotiations with potentially responsible Parties regarding the release of hazardous substances that may have resulted in injury to the natural resources under Federal and/or State trusteeship.

4. EPA and Respondent recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of fact, conclusions of law and determinations in Sections V and VI of this Settlement Agreement. Respondent agrees to comply with and be bound by the terms of this Settlement Agreement and further agrees that it will not contest the basis or validity of this Settlement Agreement or its terms.

II. PARTIES BOUND

5. This Settlement Agreement applies to and is binding upon EPA and upon Respondent and its successors and assigns. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter such Respondent's responsibilities under this Settlement Agreement.

6. Respondent is jointly and severally liable for carrying out all activities required by this Settlement Agreement.

7. Respondent shall ensure that its contractors, subcontractors, and representatives receive a copy of this Settlement Agreement and comply with this Settlement Agreement. Respondent shall be responsible for any noncompliance with this Settlement Agreement.

8. Each undersigned representative of Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement Agreement and to execute and legally bind Respondent to this Settlement Agreement.

III. STATEMENT OF PURPOSE

9. In entering into this Settlement Agreement, the objectives of EPA and Respondent are: (a) to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from the Site, by conducting a Remedial Investigation as more specifically set forth in the Statement of Work ("SOW") attached as Exhibit C to this Settlement Agreement; (b) to identify and evaluate remedial alternatives to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site, by conducting a Feasibility Study as more specifically set forth in Exhibit C to this Order; (c) to recover future response and oversight costs incurred by EPA with respect to the work agreed to in this Settlement Agreement and as set forth below; and (d) to resolve EPA's claim for past response costs incurred in relation to OU2 up to and including November 30, 2007; and (e) to provide for the potential future disbursements from a special account for RI/FS work performed by Respondent pursuant to this Settlement Agreement. Consistent with and to the extent provided in 40 CFR § 300.505, EPA and Respondent intend to provide the State with a meaningful opportunity for review and comment regarding the Work to be performed under this Settlement Agreement.

10. The Work conducted under this Settlement Agreement is subject to approval by EPA and shall provide all appropriate and necessary information to assess Site conditions and evaluate alternatives to the extent necessary to select a remedy that will be consistent with CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300 ("NCP"). Respondent shall conduct all Work under this Settlement Agreement in compliance with CERCLA, the NCP, and all applicable EPA guidances, policies, and procedures.

IV. DEFINITIONS

11. Unless otherwise expressly provided herein, terms used in this Settlement Agreement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the

meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

- a. "CERCLA" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, *et seq.*
- b. "CDPHE" means the Colorado Department of Public Health and Environment.
- c. "Day" means a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next working day.
- d. "Effective Date" shall be the effective date of this Settlement Agreement as provided in Section XXXII.
- e. "EPA" means the United States Environmental Protection Agency and any successor departments or agencies of the United States.
- f. "Engineering Controls" means constructed containment barriers or systems that control one or more of the following: downward migration, infiltration or seepage of surface runoff or rain; or natural leaching migration of contaminants through the subsurface over time. Examples include caps, engineered bottom barriers, immobilization processes, and vertical barriers.
- g. "Future Response Costs" means all costs related to the RI/FS and this Settlement Agreement, from December 1, 2007 forward, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Settlement Agreement, verifying the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, costs of finalizing the Baseline Risk Assessment, Agency for Toxic Substances and Disease Registry ("ATSDR") costs, the costs incurred pursuant to Paragraph 61 (costs and attorneys fees and any monies paid to secure access, including the amount of just compensation), Paragraph 46 (Emergency Response and Notification of Releases), and Paragraph 104 (Work Takeover).
- h. "Institutional controls" means non-engineered instruments, such as administrative and/or legal controls, that help to minimize the potential for human exposure to contamination and/or protect the integrity of a remedy by limiting land and/or resource use. Examples of institutional controls include easements and covenants, zoning restrictions, special building permit requirements, and well drilling prohibitions.

- i. "Interest" means interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.
- j. "Interest Earned" means the respective interest earned on amounts deposited in the VB/I70 Special Account and the VB/I70 OU2 Disbursement Special Account, which shall be computed monthly at a rate based on the annual return on investments of the Hazardous Substance Superfund. The applicable rate of interest shall be the rate in effect at the time the interest accrues.
- k. "Manager" means the manager of the City and County of Denver's Department of Environmental Health.
- l. "NCP" means the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.
- m. "Paragraph" means a portion of this Settlement Agreement identified by an Arabic numeral.
- n. "Parties" means EPA and Respondent.
- o. "Past Response Costs" means all direct and indirect costs incurred by the United States in reviewing or developing information, plans, reports and other items relative to the Site through and including November 30, 2007 in the approximate amount of Three Hundred Forty Thousand Three Hundred Seventy-Six Dollars and Thirty-Three Cents (\$340,376.33) including, but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, and Agency for Toxic Substances and Disease Registry ("ATSDR").
- p. "RCRA" means the Resource Conservation and Recovery Act, also known as the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901, *et seq.*
- q. "Respondent" means the City and County of Denver Colorado, a municipal corporation of the State of Colorado.
- r. "RI/FS WP/QAPP" means the Remedial Investigation/Feasibility Study WP/QAPP/Quality Assurance Project Plan for OU2.
- s. "Section" means a portion of this Settlement Agreement identified by a Roman numeral.
- t. "Settlement Agreement" means this Administrative Settlement Agreement and Order on Consent, the SOW, all appendices attached hereto (listed in Section XXX) and all documents incorporated by reference into this document including without limitation EPA-approved submissions. EPA-approved submissions (other

than progress reports) are incorporated into and become a part of the Settlement Agreement upon approval by EPA. In the event of conflict between this Settlement Agreement and any appendix or other incorporated documents, this Settlement Agreement shall control.

u. "Site" means Operable Unit 2 of the Vasquez Boulevard/Interstate 70 Superfund site which includes the former Omaha & Grant Smelter location, located near 42nd Avenue and St. Vincent Street, south of Interstate 70 and the existing Denver Coliseum, in Denver Colorado. The Site excludes Operable Units 1 and 3 of the Vasquez Boulevard/Interstate 70 Superfund site. OU 2 is depicted generally on the map attached as Exhibit A.

v. "State" means the State of Colorado.

w. "Statement of Work" or "SOW" means the Statement of Work for development of a RI/FS for Operable Unit 2, as set forth in Exhibit C to this Settlement Agreement. The Statement of Work is incorporated into this Settlement Agreement and is an enforceable part of this Settlement Agreement as are any modifications made thereto in accordance with this Settlement Agreement.

x. "VB/I70 OU2 Disbursement Special Account" means the special account established for the Site pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3), and this Settlement Agreement.

y. "VB/I70 Special Account" means the special account established at the Site by EPA pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3).

z. "Vasquez Boulevard/Interstate 70 Superfund site" or "VB/I70" consists of Operable Units 1, 2 and 3. Operable Unit 1 generally consists of the residential soils that had been contaminated with heavy metals, for which EPA completed cleanup in 2006. Operable Unit 3 generally consists of the Vasquez Boulevard/Interstate 70 Superfund site in and around the Argo Smelter. All three Operable Units are in the northern portion of Denver, Colorado and are depicted generally on the map attached as Exhibit B.

aa. "Waste Material" means (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (4) any "hazardous material" under § 25-15-101, Colorado Revised Statutes.

bb. "Work" means all activities Respondent is required to perform under this Settlement Agreement, except those required by Section XIV (Retention of Records).

V. FINDINGS OF FACT

12. The Site is located near 42nd Avenue and St. Vincent Street and the boundaries are Northwest and Northeast – Union Pacific Railroad; Southwest – 39th Avenue; and Southeast – Brighton Boulevard. It consists of the former Omaha & Grant Smelter and surrounding areas. (EPA ID #089RO2)

13. The former Omaha & Grant Smelter was built on approximately 50 acres bordering the South Platte River located south of I-70 and the existing Denver Coliseum.

14. Between 1878 and 1882, the Grant Smelter Company owned and operated a smelter in Leadville, Colorado. A fire destroyed the smelter and the company replaced that smelter with one it constructed in Denver (the “Grant Smelter”). The Grant Smelter Company commenced construction of the Grant Smelter in Denver on July 2, 1882.

15. General Operational and Corporate History:

a. The Grant Smelter consisted of eight blast furnaces and was fully operational by November 1882.

b. The Grant Smelter Company operated the Grant Smelter until 1883.

c. On July 5, 1883, the Grant Smelter Company merged with the Omaha Smelting and Refining Company and formed the Omaha & Grant Smelting and Refining Company, the latter of which continued to operate the Grant Smelter.

d. In 1887 the Grant Smelter facility was expanded by installation of additional roasters, bringing the total to 29 roasting furnaces.

e. On January 1, 1892, the Omaha & Grant Smelter Company expanded the Grant Smelter facilities again adding 8 smelting furnaces, 20 roasting and fusing furnaces. In 1892, the approximately 352’ stack was also built.

f. On July 18, 1892, the corporation was renamed the Omaha & Grant Smelting Company.

g. The Omaha & Grant Smelting Company used a lead smelting process to produce gold, silver, copper, and lead. The smelting process involved the fusing of ore, fuel, and lime to form a melted product. As a result of this process, lead and silver would sink to the bottom of an iron chamber and the slag would float on the surface of the liquid metals.

h. In 1899, the Omaha & Grant Smelting Company joined with other smelting companies and formed the American Smelting and Refining Company. The American Smelting and Refining Company continued to operate the smelter until 1902. The American Smelting and Refining Company later became ASARCO LLC (“ASARCO”).

16. The facility was closed in 1903, and subsequently the buildings were demolished. Later, all of the slag, with the exception of residual that was buried under parking lots, was removed. Historical aerial photographs show all visible slag was removed by 1949.

17. Portions of the Site were deeded to the City and County of Denver between 1920 and 1947. The City demolished the largest smokestack at the former Omaha & Grant Smelter on February 22, 1950. Other portions of the Site have been and continue to be owned or operated by the Union Pacific Railroad Company, the Pepsi Bottling Group, and various other corporate entities or individuals.

18. Waste and Waste Disposal Practices. Although detailed information about the wastes from the smelting operations is not well documented, it is known that blast furnace slag was produced from the smelting operations. Ores, fuel, and flux were delivered by rail car directly to the furnace charging doors on the upper levels of the smelter. As the smelting operations proceeded, the intermediate products flowed downhill to a lower level. Smelter workers would run slag onto a dump and load bullion onto rail cars. An 1890 Sanborn Fire Insurance Map identifies a slag dump to the north of the Omaha & Grant Smelter property.

19. On February 27, 1992, CDPHE submitted a Preliminary Assessment for the Site to EPA. The PA examined the potential threats posed by a variety of contaminants found at the Site, including lead, arsenic, and cadmium. Data from the PA finding elevated concentrations of lead and arsenic in one area indicate on-site disposal, which was a common practice around the turn of the century.

20. Lead, arsenic and cadmium are heavy metals that have toxic effects in humans and are listed as solid wastes that exhibit the characteristic of toxicity pursuant to the Resource Conservation and Recovery Act, 42 USC 6901 *et seq.*, 40 CFR 261.24.

21. The potential sources of chief concern at the former Omaha & Grant Smelter are historic smelting-related solid wastes, potentially including slag, stack emissions, and other solid and liquid wastes generated and disposed of on the Site. Such wastes and contamination may exist in current surface soils as well as in buried subsurface deposits. Much of the contaminated soil is underneath impermeable surfaces of commercial properties along Brighton Boulevard and the Pepsi plant and underneath the Coliseum parking lot. Commercial workers would not be exposed to subsurface soils unless the soils were excavated and left exposed.

22. Groundwater investigations conducted between 1992 and 1997 as part of CDOT's I-70 expansion project did not detect lead or arsenic concentrations above the State's groundwater standard. At the request of EPA, in 2005 and 2006, Respondent conducted groundwater sampling. While one of three downgradient wells (which was located in the northeast corner of the Coliseum parking lots) showed slightly elevated concentrations of arsenic, the sampling showed no elevated concentrations of metals in three upgradient wells or in the other two downgradient wells.

23. Pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, EPA proposed the VB/I-70 Superfund site for placement on the National Priorities List ("NPL") set forth at 40 CFR Part

300, Appendix B, by publication in the Federal Register on January 19, 1999. The VB/I-70 Superfund site was placed on the NPL on July 22, 1999.

24. In September 2001, ASARCO entered into an Administrative Order on Consent for Remedial Investigation/Feasibility Study (RI/FS) at OU2. The AOC required ASARCO to conduct an RI/FS. ASARCO initiated RI work pursuant to that order, but stopped before completing sampling activities. In 2005, ASARCO filed for bankruptcy protection in the United States Bankruptcy Court for the Southern District of Texas, Corpus Christi Division, In Re: ASARCO LLC, et al. Case No. 05-21207-C-11. EPA filed a claim for past and future response costs with the Bankruptcy Court. Respondent filed a claim in the same proceeding for costs relating to the Site. The ASARCO bankruptcy proceedings have not been resolved yet, but the United States has a tentative settlement regarding its claims at VB/I-70.

25. Respondent, the City and County of Denver, Colorado is a local government that owns portions of the Site generally depicted in Exhibit A.

VI. EPA's CONCLUSIONS OF LAW AND DETERMINATIONS

26. Based on the Findings of Fact set forth above, EPA has determined that:

27. The VB/I-70 site is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

28. The arsenic, lead, and cadmium contamination found at the Site, as identified in the Findings of Fact above, are "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

29. The conditions described in Paragraphs 15 and 18 through 22 of the Findings of Fact above constitute an actual and/or threatened "release" of a hazardous substance at and from the Site as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

30. Respondent is a "person" as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

31. Respondent is a potentially responsible party under Sections 104, 107 and 122 of CERCLA, 42 U.S.C. §§ 9604, 9607 and 9622.

a. Respondent is a person who either generated the hazardous substances found at the Site, is a person who at the time of disposal of any hazardous substance owned or operated the Site, or is the current owner of a portion of the Site as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1). Respondent therefore may be liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). Respondent specifically denies that it is or was an operator of the Site at any time.

32. The actions required by this Settlement Agreement are necessary to protect the public health, welfare or the environment, are in the public interest, 42 U.S.C. § 9622(a), are

consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1), 9622(a), and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(a).

33. EPA has determined that Respondent is qualified to conduct the RI/FS within the meaning of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a).

VII. SETTLEMENT AGREEMENT AND ORDER

34. Based upon the foregoing Findings of Fact and Conclusions of Law and Determinations, it is hereby Ordered and Agreed that Respondent shall comply with all provisions of this Settlement Agreement, including but not limited to all appendices to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement. Work performed in compliance with this Settlement Agreement shall be presumptively determined to be not inconsistent with the NCP.

VIII. CONTRACTORS, PROJECT MANAGER, PROJECT COORDINATOR

35. Selection of Contractors, Personnel. All Work performed under this Settlement Agreement shall be under the direction and supervision of qualified personnel. Within 30 days of the Effective Date of this Settlement Agreement, Respondent shall notify EPA in writing of the names, titles, and qualifications of the key personnel, including contractors, subcontractors, consultants and laboratories to be used in carrying out such Work. With respect to any proposed contractor, Respondent shall demonstrate that the proposed contractor has a quality system which complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995, or most recent version), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01/002, March 2001 or subsequently issued guidance) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for Respondent shall be subject to EPA's review, for verification that such persons meet minimum technical background and experience requirements. This Settlement Agreement is contingent on Respondent's demonstration to EPA's satisfaction that Respondent is qualified to perform properly and promptly the actions set forth in this Settlement Agreement and EPA shall not unreasonably withhold timely approval. If EPA disapproves in writing of any person's technical qualifications, Respondent shall notify EPA of the identity and qualifications of the replacements within 30 days of the written notice. If EPA subsequently disapproves of the replacement, EPA reserves the right to terminate this Settlement Agreement and to conduct a complete RI/FS, and to seek reimbursement for costs and penalties from Respondent. During the course of the RI/FS, Respondent shall notify EPA in writing of any changes or additions in the personnel used to carry out such Work, providing their names, titles, and qualifications. EPA shall have the same right to disapprove changes and additions to personnel as it has hereunder regarding the initial notification.

36. Respondent designates Lisa Farrell as the Project Manager ("PM") responsible for administration of all actions by Respondent required by this Settlement Agreement. To the greatest extent possible, the Project Manager shall be present on site or readily available during Site Work. EPA retains the right to disapprove of subsequent Project Managers. If EPA disapproves of the designated Project Manager, Respondent shall designate a different Project Manager and shall notify EPA of that person's name, address, telephone number and qualifications within thirty (30) days following EPA's disapproval. Respondent shall have the right to change its Project Manager, subject to EPA's right to disapprove. Respondent shall notify EPA five (5) days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notification. Receipt by Respondent's Project Manager of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by Respondent. Documents to be submitted to Respondent shall be sent to

City and County of Denver
Department of Environmental Health
Environmental Quality Division
201 West Colfax Avenue, Department 1009
Denver, Colorado 80202
Attn: Project Manager, Vasquez Boulevard/Interstate 70 OU2

37. EPA has designated Sam Garcia of the Office of Ecosystems Protection and Remediation ("EPR") in EPA Region 8, as its Project Coordinator. EPA will notify Respondent of a change of its designated Project Coordinator. Except as otherwise provided in this Settlement Agreement, Respondent shall direct all submissions required by this Settlement Agreement to the Project Coordinator at

US EPA (8EPR-SR)
1595 Wynkoop St.
Denver, CO 80202-1129.

38. EPA's Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager ("RPM") and On-Scene Coordinator ("OSC") by the NCP. In addition, EPA's Project Coordinator shall have the authority consistent with the NCP, to halt any Work required by this Settlement Agreement, and to take any necessary response action when s/he determines that conditions at the Site may present an immediate endangerment to public health or welfare or the environment. The absence of the EPA Project Coordinator from the area under study pursuant to this Settlement Agreement shall not be cause for the stoppage or delay of Work.

39. EPA shall arrange for a qualified person to assist in its oversight and review of the conduct of the RI/FS, as required by Section 104(a) of CERCLA, 42 U.S.C. Section 9604(a). Such person shall have the authority to observe Work and make inquiries in the absence of EPA, but not to modify the RI/FS WP/QAPP.

IX. WORK TO BE PERFORMED

40. Activities and Deliverables. Respondent hereby agrees to conduct the RI/FS for the Site. Nothing in the Settlement Agreement requires Respondent to perform RD/RA related

activities. The Parties recognize that the successful implementation of this Settlement Agreement requires that each Party participate in the consultative process, as defined in the SOW, in good faith. The Parties recognize that, as the Party responsible for project management, Respondent bears a particular burden to initiate consultation with EPA and the State to ensure the success of the consultative process.

41. Respondent shall conduct activities and submit plans, reports or other deliverables as provided by the SOW. The SOW is attached as Exhibit C and is hereby incorporated into this Settlement Agreement. All Work shall be conducted in accordance with the provisions of this Settlement Agreement, the SOW, CERCLA, the NCP and EPA guidance, including the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" (OSWER Directive # 9355.3-01, October 1988 or subsequently issued guidance), "Guidance for Data Useability in Risk Assessment" (OSWER Directive #9285.7-05, October 1990 or subsequently issued guidance), and guidance referenced therein, and guidances listed in Attachment 1 of the SOW. If EPA or the State determine that any additional guidance, policies, and procedures are applicable, EPA shall notify Respondent of such fact sufficiently in advance of the due date of the Draft RI or FS report for Respondent to consider and incorporate changes necessitated by the additional requirement. Respondent, however, is entitled to an extension of time identified in Table 1 of the SOW ("Table 1") as reasonably necessary to incorporate the newly identified requirements. Alternatively, EPA may wait until after submittal of the affected draft report to notify Respondent of such applicable additional guidance, policies, and procedures, which Respondent will incorporate as appropriate. The general activities that Respondent is required to perform are identified below, followed by a list of plans, reports and other deliverables. The tasks that Respondent must perform are described more fully in the SOW and guidances. The activities, plans, reports and other deliverables identified below have been developed as provided in the RI/FS WP/QAPP, which has been submitted to EPA and the State. All Work performed under this Settlement Agreement shall be in accordance with the schedules established in Table 1, and in full accordance with the standards, specifications, and other requirements of the RI/FS WP/QAPP, as initially approved or modified by EPA, and as may be amended or modified by EPA from time to time. In accordance with the schedules established in this Settlement Agreement or in the SOW, Respondent shall submit to EPA and the State 2 copies of all plans, reports and other deliverables required under this Settlement Agreement, the SOW and the RI/FS WP/QAPP. All plans, reports and other deliverables will be reviewed and approved by EPA pursuant to Section X (EPA Approval of Plans and Other Submissions). Upon request by EPA, Respondent shall submit in electronic form all portions of any plan, report or other deliverable Respondent is required to submit pursuant to provisions of this Settlement Agreement.

a. Scoping. EPA has determined the Site-specific objectives of the RI/FS and devised a general management approach for the Site. Respondent has conducted the remainder of scoping activities as described in the SOW and referenced guidances. Respondent has provided EPA and the State with the following plans, reports and other deliverables.

i) RI/FS WP/QAPP. Respondent has submitted to EPA and the State a complete RI/FS WP/QAPP. EPA has approved the RI/FS WP/QAPP and it is hereby incorporated into and becomes enforceable under this Settlement

Agreement. The following deliverables have been submitted to EPA and the State and approved by EPA:

- (1) Sampling and Analysis Plan
- (2) Site Health and Safety Plan
- (3) Materials Management Plan

b. Reuse Assessment. Realistic assumptions of the reasonably anticipated future uses for the Site have been developed by Respondent. These assumptions will be considered in implementation of the RI/FS WP/QAPP and Risk Assessments.

c. Baseline Human Health Risk Assessment and Ecological Risk Assessment. EPA will complete the Baseline Human Health Risk Assessment and Ecological Risk Assessment ("Risk Assessments").

d. Draft Remedial Investigation Report. In accordance with Table 1, Respondent shall submit to EPA for review and approval pursuant to Section X (EPA Approval of Plans and Other Submissions), a Draft Remedial Investigation Report consistent with the SOW and RI/FS WP/QAPP. Respondent shall include a site characterization in the RI Report.

e. Presumptive Remedy Approach. The Parties have developed a consultative approach to exchanging information and conducting planning activities at the Site. Respondent shall evaluate the potential existence of principal threat wastes to verify the applicability of the presumptive remedy approach as provided in the SOW and RI/FS WP/QAPP. The parties will discuss the results of that evaluation using the consultative approach and EPA will approve or reject such an approach for inclusion in the Draft FS Report.

f. Draft FS Report. If the analysis in Subparagraph e above verifies the applicability of the presumptive remedy approach, Respondent shall submit a draft FS report to EPA for review and approval pursuant to Section X (EPA Approval of Plans and Other Submissions). The Parties shall rely upon EPA's guidance for *Presumptive Remedy for Metals in Soils Sites* and the related nationwide *Feasibility Study Analysis Report*. The Draft FS Report, using the presumptive remedy approach, shall include, as appropriate, the following elements:

- (1) Summary of Feasibility Study objectives.
- (2) Summary of Remedial Action Objectives (RAOs) shall include remedial action objectives for engineering controls as well as for institutional controls.

(3) Evaluation of applicability of presumptive remedy approach and development of general response action(s) for each medium of interest to satisfy the RAOs.

(4) Identification & Screening of Remedial Technologies based upon General Response Actions.

(5) Description of Remedial Alternatives that incorporate applicable remedial technologies and address the RAOs.

(6) Detailed Analysis of Remedial Alternatives that uses the NCP's nine criteria, 40 CFR 300.430(e).

g. If the presumptive remedy approach is not supported, the Respondent shall develop a new WP/QAPP for the FS Report consistent with EPA's standard FS procedures, including an updated Table 1 schedule for the draft FS Report. If the parties disagree as to the applicability of the presumptive remedy approach, an extension of time for the submittal of the draft FS report in Table 1 will be granted for the pendency of the disagreement.

42. Upon receipt of the draft FS report, EPA will evaluate, as necessary, the estimates of the risk to the public and environment that are expected to remain after a particular remedial alternative has been completed and will evaluate the durability, reliability and effectiveness of any proposed Institutional Controls.

43. Modification of the RI/FS WP/QAPP.

a. Modifications and Schedule Changes

i) Respondent may propose modifications to the SOW, RI/FS WP/QAPP, project plans, and reports to be submitted, and the due dates for the Draft RI and FS reports pursuant to this Settlement Agreement. If the Respondent proposes any modifications, it shall submit them to EPA for review and approval.

ii) The EPA Project Coordinator may authorize in writing, modifications to the approved project plans, or the studies, designs, techniques or procedures undertaken or utilized in performing the Work required under this Settlement Agreement, provided that the modifications are consistent with the SOW. These approvals may be in electronic form (e-mail) and do not require the submission of modified RI/FSWP/QAPP.

b. Unanticipated or Changed Circumstances. In the event of unanticipated or changed circumstances at the Site, Respondent shall notify the EPA Project Coordinator by telephone within 24 hours of discovery of these unanticipated or changed circumstances. In the event that EPA determines that the immediate threat or the unanticipated or changed circumstances warrant any change in the RI/FS WP/QAPP, EPA shall modify or amend the RI FS WP/QAPP in writing

accordingly. Respondent shall perform the RI/FS WP/QAPP as modified or amended.

c. Additional Data/Work.

- i) EPA may determine that in addition to tasks defined in the initially approved RI/FS WP/QAPP, other additional Work may be necessary to accomplish the objectives of the RI/FS. EPA shall direct in writing that the Respondent perform the additional Work and shall specify the basis and reasons for EPA's determination that the additional Work is necessary.
- ii) Respondent shall confirm its willingness to perform the additional Work, or invoke dispute resolution, in writing to EPA within 7 days following receipt of the EPA request. If Respondent objects to any additional Work determined by EPA to be necessary pursuant to this Paragraph, Respondent may seek dispute resolution pursuant to Section XV (Dispute Resolution). The SOW and RI/FS WP/QAPP shall be modified in accordance with the final resolution of the dispute.
- iii) Respondent shall complete the additional Work according to the standards and specifications set forth or approved by EPA in a written modification to the RI/FS WP/QAPP or written RI/FS WP/QAPP supplement. EPA reserves the right to conduct the Work itself at any point, to seek reimbursement from Respondent, and to seek any other appropriate relief.
- iv) If at any time during the RI/FS process, Respondent identifies a need for either additional data or additional Work, Respondent shall submit a memorandum documenting the need for such additional data or Work to the EPA Project Coordinator. EPA will determine whether the additional data will be collected (or Work performed) by Respondent and whether it will be incorporated into plans, reports and other deliverables. If EPA determines that such data or Work is not necessary, EPA shall nevertheless allow Respondent to compile such data and perform such Work to the extent such data compilation and Work is not inconsistent with the NCP and provided these activities do not present an environmental or human health threat, interfere with Site operations to such a degree as to terminate Site access, or cause a delay in the schedule in Table 1.

d. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions at the Site.

44. Off-Site Shipment of Waste Material. Respondent shall, prior to any off-site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility's state and to EPA's Designated Project Coordinator. However, this notification requirement shall not apply to any off-site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

a. Respondent shall include in the written notification the following information: (1) the name and location of the facility to which the Waste Material is to be shipped; (2) the type and quantity of the Waste Material to be shipped; (3) the expected schedule for the shipment of the Waste Material; and (4) the method of transportation. Respondent shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

b. The identity of the receiving facility and state will be determined by Respondent after issuing notice to proceed to Respondent's contractor for the remedial investigation and feasibility study. Respondent shall provide the information required by Subparagraphs (a) and (c) of this Paragraph 44 as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

c. Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-site location, Respondent shall obtain EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondent shall only send hazardous substances, pollutants, or contaminants from the Site to an off-site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

45. Project Progress Reporting. The Parties have developed a consultative approach to exchanging information and conducting planning activities at the Site. The parties shall meet on a regular basis and discuss the status of the planning or work activities, sampling results, and develop plans for the upcoming work items. Consistent with this approach, project progress reports will consist of meeting notes prepared in accordance with the SOW.

46. Emergency Response and Notification of Releases.

a. In the event of any action or occurrence during performance of the Work which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action. Respondent shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondent shall also immediately notify the EPA Project Coordinator or, in the event of his/her unavailability, the On Scene Coordinator ("OSC") or the Regional Duty Officer at the Region 8 hotline at 1-800-227-8914 of the incident or Site conditions. In the event that Respondent fails to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondent shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XIX (Payment of Response Costs)

b. In addition, in the event of any release of a hazardous substance from the Site, Respondent shall immediately notify the EPA Project Coordinator, the OSC or Regional Duty Officer at 1-800-227-8914 and the National Response Center at 1-800-424-8802. Respondent shall submit a written report to EPA within 7 days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, *et seq.*

X. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

47. EPA shall review all plans, reports, and other items required to be submitted for approval pursuant to this Settlement Agreement. Consistent with CERCLA and the NCP, EPA shall provide the State with reasonable opportunity for review and comment and the State will provide its comments directly to Respondent. After review of any plan, report or other item that is required to be submitted for approval pursuant to this Settlement Agreement, taking into account any requirements for these plans, reports, or other items required to be submitted for approval and in accordance with EPA's timeframes in Table 1, EPA shall: (a) approve, in whole or in part, the submission, including final reports; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondent modify the submission; or (e) any combination of the above. However, EPA shall not modify a submission without first providing Respondent at least one notice of deficiency, with sufficient information about nature of deficiency that Respondent may cure it, and an opportunity to cure within the applicable time period in Table 1, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects. EPA shall communicate any action taken under Subparagraphs (a) – (e) of this Paragraph 47 by written notice to Respondent and shall provide the State with a copy of such notice.

48. EPA's review and approval in accordance with Paragraph 47 shall be accomplished within the timeframes established in Table 1. Any exceedance of such time limits shall operate automatically to extend the due dates for submittal of the Draft RI/FS Reports on a day-for-day basis.

49. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Subparagraph (a), (b), (c) or (e) of Paragraph 47, Respondent shall proceed to take any action required by the plan, report or other deliverable, as approved or modified by EPA subject only to its right to invoke the Dispute Resolution procedures set forth in Section XV(Dispute Resolution) with respect to the modifications or conditions made by EPA. Following EPA approval or modification of a submission or portion thereof, Respondent shall not thereafter alter or amend such submission or portion thereof unless directed by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Subparagraph 47(c) and the submission had a material defect, EPA retains the right to seek stipulated penalties, as provided in Section XVI (Stipulated Penalties).

50. Resubmission.

a. Upon receipt of a notice of disapproval, Respondent shall, within the time specified in Table 1 or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other deliverable for approval. Any stipulated penalties applicable to the submission, as provided in Section XVI, shall accrue during the period specified in Table 1 but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 51 and 52.

b. Notwithstanding the receipt of a notice of disapproval, Respondent shall, within the time specified in Table 1, proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA. Implementation of any non-deficient portion of a submission shall not relieve Respondent of any liability for stipulated penalties under Section XVI (Stipulated Penalties).

c. Respondent shall not proceed further with any subsequent activities or tasks until receiving EPA approval, approval on condition or modification of the following deliverables: RI/FS WP/QAPP, Draft Remedial Investigation Report, and Draft Feasibility Study Report. While awaiting EPA approval, approval on condition or modification of these deliverables, Respondent shall proceed with all other tasks and activities which may be conducted independently of these deliverables, in accordance with the schedule set forth under this Settlement Agreement.

d. For all remaining deliverables not listed above in Subparagraph c of this Paragraph 50, Respondent shall proceed with all subsequent tasks, activities and deliverables without awaiting EPA approval on the submitted deliverable. EPA reserves the right to stop Respondent from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during the RI/FS.

51. If EPA disapproves a resubmitted plan, report or other deliverable, or portion thereof, EPA may again direct Respondent to correct the deficiencies in accordance with the preceding paragraphs of this Section X. EPA also retains the right to modify or develop the plan, report or other deliverable. Respondent shall implement any such plan, report, or deliverable as corrected, modified or developed by EPA, subject only to Respondent's right to invoke the procedures set forth in Section XV (Dispute Resolution).

52. If upon resubmission, a plan, report, or other deliverable is disapproved or modified by EPA due to a material defect, Respondent shall be deemed to have failed to submit such plan, report, or other deliverable timely and adequately unless Respondent invokes the dispute resolution procedures in accordance with Section XV (Dispute Resolution) and EPA's action is revoked or substantially modified pursuant to a Dispute Resolution decision issued by EPA or superseded by an agreement reached pursuant to that Section. The provisions of Section XV (Dispute Resolution) and Section XVI (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is not otherwise revoked, substantially

modified or superseded as a result of a decision or agreement reached pursuant to the Dispute Resolution process set forth in Section XV, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XVI.

53. In the event that EPA takes over some of the tasks, but not the preparation of the RI Report or the FS Report, Respondent shall incorporate and integrate information supplied by EPA into the final reports.

54. All plans, reports, and other deliverables submitted to EPA under this Settlement Agreement shall, upon approval or modification by EPA, be incorporated into and enforceable under this Settlement Agreement. In the event EPA approves or modifies a portion of a plan, report, or other deliverable submitted to EPA under this Settlement Agreement, the approved or modified portion shall be incorporated into and enforceable under this Settlement Agreement.

55. Neither failure of EPA to expressly approve or disapprove of Respondent's submissions within a specified time period, nor the absence of comments, shall be construed as approval by EPA. Whether or not EPA gives express approval for Respondent's deliverables, Respondent is responsible for preparing deliverables acceptable to EPA.

XI. QUALITY ASSURANCE, SAMPLING, AND ACCESS TO INFORMATION

56. Quality Assurance. Respondent shall assure that Work performed, samples taken and analyses conducted conform to the requirements of the SOW, the QAPP and guidances identified therein. Respondent will assure that field personnel used by Respondent are properly trained in the use of field equipment and in chain of custody procedures. Respondent shall only use laboratories which have a documented quality system that complies with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA.

57. Sampling.

a. All results of sampling, tests, modeling or other data (including raw data) generated by Respondent, or on Respondent's behalf, during the period that this Settlement Agreement is effective, shall be submitted to EPA in conjunction with the consultative project progress meetings. EPA will make available to Respondent validated data generated by EPA unless it is exempt from disclosure by any federal or state law or regulation.

b. Respondent shall verbally notify EPA and the State at least 2 days prior to conducting significant field events as described in the SOW or RI/FS WP/QAPP. At EPA's verbal or written request, or the request of EPA's oversight assistant, Respondent shall allow split or duplicate samples to be taken by EPA (and its authorized representatives) or the State, of any samples collected in implementing this Settlement Agreement. All split samples of Respondent shall be analyzed by the methods identified in the QAPP.

58. Access to Information.

a. Respondent shall provide to EPA and the State, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondent shall also make available to EPA and the State, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

b. Respondent may assert business confidentiality claims covering part or all of the documents or information submitted to EPA and the State under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when it is submitted to EPA and the State, or if EPA has notified Respondent that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondent. Respondent shall segregate and clearly identify all documents or information submitted under this Settlement Agreement for which Respondent asserts business confidentiality claims.

c. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the Respondent asserts such a privilege in lieu of providing documents, they shall provide EPA and the State with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the contents of the document, record, or information; and 6) the privilege asserted by Respondent. However, no documents, reports, or other information required to be created or generated pursuant to this Settlement Agreement shall be withheld on the grounds that they are privileged.

d. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.

59. In entering into this Settlement Agreement, Respondent waives any objections to any data gathered, generated, or evaluated by EPA, the State or Respondent in the performance or oversight of the Work that has been verified according to the quality assurance/quality control ("QA/QC") procedures required by the Settlement Agreement or any EPA-approved RI/FS WP/QAPP. If Respondent objects to any other data relating to the RI/FS, Respondent shall submit to EPA a report that specifically identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within 15 days of the report containing the data.

XII. SITE ACCESS AND INSTITUTIONAL CONTROLS

60. If the Site, or any other property where access is needed to implement this Settlement Agreement, is owned or controlled by Respondent, Respondent shall, commencing on the Effective Date, provide EPA and the State, and their representatives, including contractors, with access at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to this Settlement Agreement.

61. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondent, Respondent shall use its best efforts to obtain all necessary access agreements within 30 days after the Effective Date, or as otherwise specified in writing by the EPA Project Coordinator. Respondent shall immediately notify EPA if after using its best efforts it is unable to obtain such agreements. Respondent shall describe in writing its efforts to obtain access. If Respondent cannot obtain access agreements, EPA may either (i) obtain access for Respondent or assist Respondent in gaining access, to the extent necessary to effectuate the response actions described herein, using such means as EPA deems appropriate; (ii) perform those tasks or activities with EPA contractors; or (iii) terminate the Settlement Agreement. Respondent shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XVIII (Payment of Response Costs). If EPA performs those tasks or activities with EPA contractors and does not terminate the Settlement Agreement, Respondent shall perform all other tasks or activities not requiring access to that property, and shall reimburse EPA for all costs incurred in performing such tasks or activities. Respondent shall integrate the results of any such tasks or activities undertaken by EPA into its plans, reports and other deliverables.

62. Notwithstanding any provision of this Settlement Agreement, EPA retains all of its access authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XIII. COMPLIANCE WITH OTHER LAWS

63. Respondent shall comply with all applicable local, state and federal laws and regulations when performing the RI/FS. No local, state, or federal permit shall be required for any portion of any action conducted entirely on-Site, including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work is to be conducted off-site and requires a federal or state permit or approval, Respondent shall submit timely and complete applications and take all other actions necessary to

obtain and to comply with all such permits or approvals. This Settlement Agreement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XIV. RETENTION OF RECORDS

64. During the pendency of this Settlement Agreement and for a minimum of 10 years after commencement of construction of any remedial action, Respondent shall preserve and retain all non-identical copies of documents, records, and other information (including documents, records, or other information in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any retention policy to the contrary. Until 10 years after commencement of construction of any remedial action, Respondent shall also instruct its contractors and agents to preserve all documents, records, and other information of whatever kind, nature or description relating to performance of the Work.

65. At the conclusion of this document retention period, Respondent shall notify EPA at least 90 days prior to the destruction of any such documents, records or other information, and, upon request by EPA, Respondent shall deliver any such documents, records, or other information to EPA. Respondent may assert that certain documents, records, and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege, Respondent shall do so in accordance with the procedure set forth in Paragraph 58 (c) and no documents, reports, or other information required to be created or generated pursuant to this Settlement Agreement shall be withheld on the grounds that they are privileged.

66. Respondent hereby certifies that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by EPA or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

XV. DISPUTE RESOLUTION

67. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving all disputes arising out of or related to this Settlement Agreement. The Parties acknowledge that EPA conferred with the State regarding resolution of potential disputes that arise out of or relating to a position taken by the State when EPA and Respondent are not in disagreement with each other. The following provision is the result of those discussions and was agreed to by the State: after consultation with the State, the Parties hereby agree to use this provision as a way of resolving disputes arising out of or relating to the position taken by the State. All disputes arising out of this Settlement Agreement in the first instance are subject to informal negotiations and the Parties shall attempt to resolve such disputes informally as soon as practical. A dispute will be

considered to have arisen when one party sends the other party a written Notice of Dispute at which time the Negotiation Period will commence.

68. If Respondent objects to any EPA action-taken pursuant to this Settlement Agreement, including, billings for response costs, or to any position taken by the State even if EPA and Respondent are not in disagreement, it shall notify EPA and the State in writing of its objection(s) within three (3) days of such action, unless the objection(s) has/have been resolved informally. The Parties shall have two days from EPA's receipt of Respondent's written objection(s) to resolve the dispute (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA. Such extension may be granted verbally but must be confirmed in writing. Informal negotiations shall begin at the project level between EPA's Project Coordinator and Respondent's Project Manager. If they fail to resolve the dispute at this level within seven (7) days, the Respondent shall refer the matter to the Assistant Regional Administrator, Ecosystems Protection and Remediation, EPA Region 8 (ARA), and the Director of the Environmental Quality Division, Department of Environmental Health, City and County of Denver (Director) for further informal negotiations. Informal negotiations may not exceed three (3) days from the referral date as provided in this Paragraph, unless it is extended by written agreement of the Parties.

69. If the Parties cannot resolve a dispute by informal negotiations under the preceding paragraphs, the position advanced by EPA shall be considered binding, unless within three (3) days after the ARA and the Director conclude their informal negotiations, the Respondent provides a written Notice of Formal Dispute to the United States invoking formal dispute resolution.

70. Within three (3) days of serving the Notice of Formal Dispute, Respondent shall serve a Statement of Position, and within three (3) days of receipt of Respondent's Statement of Position, EPA shall serve its Statement of Position. The Parties may change either or both of the deadlines for submission, which agreement must be confirmed in writing. Within four (4) days of Respondent's receipt of EPA's Statement of Position, the Deputy Regional Administrator and the Manager shall meet to discuss and make good faith efforts to resolve the dispute. If the Parties do not resolve a dispute, the Deputy Regional Administrator shall issue a written decision within two (2) days of this meeting. EPA's decision shall be considered binding.

71. Notwithstanding the provisions of Paragraph 70, if the matter in dispute is an assertion of separate and independent jurisdiction of state law, Respondent reserves the right to respond to the State in accordance with State law and regulatory provisions, provided the action is not contrary to the express terms of this Settlement Agreement. If the assertions of the State are contrary to the terms of this Settlement Agreement, EPA's ARA shall meet with the State Executive Director in an effort to resolve this matter.

72. All Notice(s) of Dispute and Statements(s) of Position shall also be provided to the State. The State may not participate in the resolution conferences directly (except by agreement of the Parties), but will be allowed to provide its written perspective of the disputed matter to EPA and Respondent.

73. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement Agreement.

74. Respondent may request that obligations that are the subject of any dispute, or integrally related to disputed subjects, be tolled during the pendency of the dispute resolution process. Respondent's other obligations not affected by the dispute under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section. Further, no penalties may accrue on matters relating to or arising out of any position taken by the State when the EPA and Respondent are not in disagreement with each other.

75. Following resolution of the dispute, as provided by this Section, if Respondent prevails, partly or fully, on a dispute, that impacts the due date for submittal of the RI/FS draft reports, such dates shall be extended. EPA shall include the length of the extension in its decision regarding the disputed matter. Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision regardless of whether Respondent agrees with the decision.

XVI. STIPULATED PENALTIES

76. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraph 77: 1) for failure to submit either the Draft RI or FS Reports by the date established in Table 1, unless the date is extended pursuant to this Settlement Agreement or as otherwise agreed by EPA or 2) unless excused under Section XVII (Force Majeure). Stipulated penalties do not apply to other submittals, nor to multiple submittals required in accordance with the review and resubmittal sequence described in Section X (EPA Approval of Plans and Other Submissions).

77. Stipulated Penalty Amounts

a. The following stipulated penalties shall accrue per day for noncompliance identified in Paragraph 76:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 1,000	1st through 14th day
\$ 2,500	15th through 30th day
\$ 32,500	31st day and beyond

78. All stipulated penalties shall begin to accrue on the day after the submittal is due, as specified in Table 1, and shall continue to accrue through submittal of the Draft Report. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

79. Following EPA's determination that Respondent has failed to comply with a requirement of this Settlement Agreement, EPA may give Respondent written notification of the same and describe the noncompliance. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondents of a violation.

80. All stipulated penalties accruing under this Section shall be due and payable to EPA within 30 days of Respondent's receipt from EPA of a demand for payment of the penalties, unless Respondent invokes the dispute resolution procedures in accordance with Section XV (Dispute Resolution). All payments to EPA under this Section shall be paid by certified or cashier's check(s) made payable to "EPA Hazardous Substances Superfund," shall be mailed to US Environmental Protection Agency, Superfund Payments, Cincinnati Finance Center, PO Box 979076, St. Louis, MO 63197-9000, shall indicate that the payment is for stipulated penalties, and shall reference the EPA Region and Site ID Number 08-9RO2, the EPA Docket Number, and the name and address of the party making payment. Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s) shall be sent to EPA as provided in Paragraph 37 and to:

Enforcement Specialist (8ENF-RC)
VB/I-70 Superfund Site, Operable Unit 2
U.S. Environmental Protection Agency, Region 8
1595 Wynkoop St.
Denver, CO 80202-1129

81. The payment of penalties shall not alter in any way Respondent's obligation to complete performance of the Work required under this Settlement Agreement.

82. Penalties shall continue to accrue as provided in Paragraph 77 during any dispute resolution period, but need not be paid until 15 days after the dispute is resolved by agreement or by receipt of EPA's decision.

83. If Respondent fails to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Respondent shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 80.

84. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(l) of CERCLA, 42 U.S.C. § 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that EPA shall not seek civil penalties pursuant to Section 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of willful violation of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Section XXII (Reservation of Rights by EPA), Paragraph 104. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

XVII. FORCE MAJEURE

85. Respondent agrees to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement, unless the performance is

delayed by a *force majeure*. For purposes of this Settlement Agreement, *force majeure* is defined as any event arising from causes beyond the control of Respondent, or of any person or entity controlled by Respondent including but not limited to Respondent's contractors and subcontractors, that delays or prevents performance of any obligation under this Settlement Agreement despite Respondent's best efforts to fulfill the obligation. *Force majeure* includes the actions or inactions of other owners of property at the Site that delay or prevent performance of Respondent's obligation(s) under this Settlement Agreement. *Force majeure* does not include financial inability to complete the Work or increased cost of performance.

86. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, Respondent shall notify EPA orally within 48 hours of when Respondent first knew that the event might cause a delay. Within 5 days thereafter, Respondent shall provide to EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to a *force majeure* event if they intend to assert such a claim; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of *force majeure* for that event for the period of time of such failure to comply and for any additional delay caused by such failure.

87. If EPA agrees that the delay or anticipated delay is attributable to a *force majeure* event, the time for performance of the obligations under this Settlement Agreement that are affected by the *force majeure* event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the *force majeure* event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, EPA will notify Respondent in writing of its decision. If EPA agrees that the delay is attributable to a *force majeure* event, EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

XVIII. ALLOCATION OF COSTS

88. Reimbursement from ASARCO Bankruptcy Settlement Funds. EPA has filed a claim for Past and Future Response Costs in the United States Bankruptcy Court for the Southern District of Texas, Corpus Christi Division, In Re: ASARCO LLC, et al., Case No. 05-21207-C-11. Respondent has filed a claim in the same proceeding for costs incurred and to be incurred at the Site. The United States has reached a tentative settlement with ASARCO for the Site. If the United States secures payment from ASARCO, Denver may seek reimbursement of eligible costs pursuant to the process established in Section XX (Disbursement of Special Account Funds). Contingent upon receipt of payment from ASARCO, \$1,377,695 of funds received from ASARCO, plus any interest accrued on such amount as provided for in the settlement agreement between the United States and ASARCO or the Reorganization Plan approved by the bankruptcy

court, shall be applied to VB/I70 OU2 Site costs in accordance with the following priority schedule.

- a. First priority shall repay EPA's Past Response Costs at the Site.
- b. Second priority shall reimburse EPA for its oversight costs relating to Denver's work in performing the RI/FS.
- c. Third priority shall pay Denver's costs in conducting the RI/FS at the Site.
- d. Fourth priority shall reimburse EPA for its oversight costs relating to any RD/RA work at the Site.
- e. Fifth priority – if any special account funds remain after all EPA costs have been reimbursed, Denver may apply for funds to pay for RD/RA and O&M work related to the Site.

XIX. PAYMENT OF RESPONSE COSTS

89. Payment of Past Response Costs

- a. Within 90 days after the Effective Date, Respondents shall pay to EPA \$18,134.32 for Past Response Costs. EPA intends to obtain reimbursement for the remaining Past Response Costs from the Asarco bankruptcy settlement, but reserves the right to pursue Respondent for such costs if not paid by Asarco or other responsible parties. Payment shall be made by either certified or cashiers check made payable to "EPA Hazardous Substance Superfund" or by Electronics Funds Transfer ("EFT") in accordance with current EFT procedures to be provided to Respondents by EPA Region 8. Each check, or letter accompanying each check, or EFT shall identify the name and address of the party making payment, the Site name, the EPA Region and Site/Spill ID Number 089R 02, and the EPA docket number for this action, and shall be sent to:

US Environmental Protection Agency
Superfund Payments
Cincinnati Finance Center
PO Box 979076
St. Louis, MO 63197-9000

- b. At the time of payment, Respondent shall send notice that payment has been made by email to acctsreceivable.cinwd@epa.gov, and to:

EPA Cincinnati Finance Office
26 Martin Luther King Drive
Cincinnati, Ohio 45268

- c. The total amount of Past Response Costs to be paid by Respondent pursuant to Subparagraph 89a shall be deposited in the VB/I70 Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or

finance response actions at or in connection with the site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

90. Future Response Costs.

a. Respondent shall pay EPA all Future Response Costs not inconsistent with the NCP that are not paid by ASARCO pursuant to Paragraph 88. EPA shall not double bill for response or oversight costs. When EPA determines that Future Response Costs, not reimbursed by Asarco, remain, EPA will submit its SCORPIOS cost summary report as outlined below. Periodically, after the above referenced reconciliation, EPA will submit its SCORPIOS cost summary report, which includes direct and indirect costs incurred by EPA, its contractors, and State costs for the Site paid by EPA incurred during the previous period. If Respondent has questions about any costs contained in the SCORPIOS report, it may request backup documentation for the costs in question. The backup documentation for Future Response Costs shall include a summary report of EPA time sheet and travel voucher information, contractor invoices, proofs of payment, work assignment documents and progress reports.

b. Respondent shall make all payments for billings submitted before June 1 by November 1 of that year, except as otherwise provided in Subparagraph 90a. Respondent shall make all payments required by this Paragraph by a certified or cashier's check or checks made payable to "EPA Hazardous Substance Superfund," referencing the name and address of the party making payment and EPA Site/Spill ID number 08-9R O2. Respondent shall send the check(s) to:

Regular mail:

US Environmental Protection Agency
Superfund Payments
Cincinnati Finance Center
PO Box 979076
St. Louis, MO 63197-9000

Express Mail:

U.S. Bank
Government Lockbox 979076
US EPA Superfund Payments
1005 Convention Plaza
SL-MO-C2-GL
St. Louis, MO 63101
314-418-1028

Wire Transfers:
Wire transfers should be sent directly to:
Federal Reserve Bank of New York
ABA: 021030004
Account Number: 68010727
SWIFT address: FRNYUS33

33 Liberty Street
New York NY 10045
Field Tag 4200 of the Fedwire message should read: "D 68010727 Environmental Protection Agency"

At the time of payment, Respondent shall send notice that payment has been made by email to acctsreceivable.cinwd@epa.gov, and to:

EPA Cincinnati Finance Office
26 Martin Luther King Drive
Cincinnati, Ohio 45268

c. The total amount to be paid by Respondent pursuant to Subparagraph 90a shall be deposited in the VB/I-70 Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

91. If Respondent does not pay Future Response Costs for amounts billed by the date set forth in Subparagraph 90b by November 1, Respondent shall pay Interest on the unpaid balance of Future Response Costs. The Interest on unpaid Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. If EPA receives a partial payment, Interest shall accrue on any unpaid balance. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent's failure to make timely payments under this Section, including but not limited to, payments of stipulated penalties pursuant to Section XVI. Respondent shall make all payments required by this Paragraph in the manner described in Paragraph 90.

92. Respondent may contest payment of any Past Response Costs and Future Response Costs in accordance with Section XV (Dispute Resolution) if it determines that EPA has made an accounting error or EPA incurred excess costs as a direct result of an EPA action that was inconsistent with the NCP. Such objection shall be made in writing within 30 days of receipt of the bill and must be sent to the EPA Project Coordinator. Any such objection shall specifically identify the contested response costs and the basis for objection. In the event of an objection, Respondent shall within the 30 day period pay all uncontested response costs to EPA in the manner described in Section XIX. Simultaneously, Respondent shall establish an interest-bearing escrow account in a federally-insured bank duly chartered in the State of Colorado and remit to that escrow account funds equivalent to the amount of the contested response costs. Respondent shall send to the EPA Project Coordinator a copy of the transmittal letter and check

paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, Respondent shall initiate the Dispute Resolution procedures in Section XV (Dispute Resolution). If EPA prevails in the dispute, within 5 days of the resolution of the dispute, Respondent shall pay the sums due (with Interest accrued) to EPA in the manner described in Section XIX. If Respondent prevails concerning any aspect of the contested costs, Respondent shall pay that portion of the costs (with Interest accrued) for which it did not prevail to EPA in the manner described in Section XIX.

93. After resolution of the dispute and final payments are made in accordance with Paragraph 92, Respondent shall be disbursed the balance, if any, of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XV (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse EPA for its Past Response Costs and Future Response Costs.

XX. DISBURSEMENT OF SPECIAL ACCOUNT FUNDS

94. Creation of VB/I-70 OU2 Disbursement Special Account and Agreement to Disburse Funds to Respondent. Within 30 days after the Effective Date, EPA shall establish a new special account, the VB/I-70 OU2 Disbursement Special Account, within the EPA Hazardous Substance Superfund. Within 30 days of EPA's receipt of the proceeds of the United States' settlement with ASARCO described in Paragraph 88, EPA shall deposit \$330,000 into the VB/I-70 OU2 Disbursement Special Account. Subject to the terms and conditions set forth in this Section, EPA agrees to make the funds in the VB/I-70 OU2 Disbursement Special Account, including Interest Earned on the funds in the VB/I-70 OU2 Disbursement Special Account, available for disbursement to Respondent as reimbursement for performance of the Work under this Settlement Agreement. EPA shall disburse funds from the VB/I-70 OU2 Disbursement Special Account to Respondent in accordance with the procedures and milestones for phased disbursement set forth in this Section.

95. Timing, Amount and Method of Disbursing Funds From the VB/I-70 OU2 Disbursement Special Account. Within 90 days of EPA's receipt of a Cost Summary and Certification, as defined by Paragraph 96, or if EPA has requested additional information or a revised Cost Summary and Certification under Subparagraph 96 c, within 90 days of receipt of the additional information or revised Cost Summary and Certification, and subject to the conditions set forth in this Section, EPA shall disburse the funds from the VB/I-70 OU2 Disbursement Special Account at the completion of the following milestones, and in the amounts set forth below:

a. Milestone Disbursement of Funds

- i) EPA approval of the Remedial Investigation Report - Actual amount of documented costs up to the full amount in the VB/I-70 OU2 Disbursement Special Account.
- ii) EPA approval of the Feasibility Study Report Actual amount of documented costs up to the entire amount remaining in the VB/I-70 OU2 Disbursement Special Account

EPA shall disburse the funds from the VB/I-70 OU2 Disbursement Special Account to Respondent in the following manner:

FEDERAL ACH/WIRE TRANSFER INSTRUCTIONS FOR THE CITY AND COUNTY OF DENVER:

ACH INSTRUCTIONS:

Bank:	JP Morgan Chase Bank 1125 17 th St., Denver, Colorado 80202
ABA #:	102001017
Account #:	193488945
For credit to:	The City and County of Denver Manager of Finance
Further credit to:	Department of Environmental Health
Text:	Explanation of payment: Reimbursement of Costs Pursuant to Administrative Order on Consent in Re: Vasquez Boulevard Superfund Site OU2

96. Requests for Disbursement of Special Account Funds.

a. Within 60 days of issuance of EPA's written confirmation that a milestone of the Work, as defined in Paragraph 95, has been satisfactorily completed, Respondent shall submit to EPA a Cost Summary and Certification, as defined in Subparagraph 96b, covering the Work performed pursuant to this Settlement Agreement up to the date of completion of that milestone. Respondent shall not include in any submission costs included in a previous Cost Summary and Certification following completion of an earlier milestone of the Work if those costs have been previously reimbursed pursuant to Paragraph 95.

b. Each Cost Summary and Certification shall include a complete and accurate written cost summary and certification of the necessary costs incurred and paid by Respondent for the Work covered by the particular submission, excluding costs not eligible for disbursement under Paragraph 97. Each Cost Summary and Certification shall contain the following statement signed by the Project Manager for Respondent (or any other designee of the Respondent with knowledge of the Work and costs):

- i) To the best of my knowledge, after thorough investigation and review of Respondent's documentation of costs incurred and paid for Work performed pursuant to this Settlement Agreement [insert, as appropriate, "up to the date

of completion of milestone 1,” “between the date of completion of milestone 1 and the date of completion of milestone 2,”] I certify that the information contained in or accompanying this submittal is true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment.

The Project Manager of Respondent shall also attach invoices that support the Cost Summary and Certification and evidence of payment of such invoices. For costs incurred by Respondent's personnel that are allowable for reimbursement, Respondent shall provide EPA a list of the documents that he or she reviewed in support of the Cost Summary and Certification. Upon request by EPA, Respondent shall submit to EPA any additional information that EPA deems necessary for its review and approval of a Cost Summary and Certification.

c. If EPA finds that a Cost Summary and Certification includes a mathematical accounting error, costs excluded under Paragraph 97, costs that are inadequately documented, or costs submitted in a prior Cost Summary and Certification, it will notify Respondent and provide an opportunity to cure the deficiency by submitting a revised Cost Summary and Certification. If Respondent fails to cure the deficiency within 30 days after being notified of, and given the opportunity to cure, the deficiency, EPA will recalculate Respondent's costs eligible for disbursement for that submission and disburse the corrected amount to Respondent in accordance with the procedures in Paragraph 95 of this Section. Respondent may dispute EPA's recalculation under this Paragraph pursuant to Section XV (Dispute Resolution). In no event shall Respondent be disbursed funds from the VB/I-70 OU2 Disbursement Special Account in excess of amounts properly documented in a Cost Summary and Certification accepted or modified by EPA.

97. Costs Excluded from Disbursement. The following costs are excluded from, and shall not be sought by Respondent for disbursement from the VB/I-70 OU2 Disbursement Special Account: (a) response costs paid pursuant to Paragraph 89 (Past Response Costs); (b) any other payments made by Respondent to the United States pursuant to this Settlement Agreement, including, but not limited to, any interest or stipulated penalties paid pursuant to Section XVI; (c) attorneys' fees and costs, except for reasonable attorneys' fees and costs necessarily related to obtaining access or developing institutional controls as required by Section XII; (d) costs of any response activities Respondent performs that are not required under, or approved by EPA pursuant to, this Settlement Agreement; (e) costs related to Respondent's litigation, settlement, development of potential contribution claims or identification of defendants; (f) internal costs of Respondent, including but not limited to, salaries, travel, or in-kind services, except for those costs that represent the work of employees of Respondent directly performing or overseeing the Work; (g) any costs Respondent incurred that are not relating to this Settlement Agreement; or (h) any costs incurred by Respondent pursuant to Section XV (Dispute Resolution).

98. Termination of Disbursements from the Special Account. EPA's obligation to disburse funds from the VB/I-70 OU2 Disbursement Special Account shall terminate upon EPA's determination that Respondent has: (a) knowingly submitted a materially false or

misleading Cost Summary and Certification; (b) submitted a materially inaccurate or incomplete Cost Summary and Certification within 60 days after being notified of, and given the opportunity to cure, the deficiency; or (c) failed to submit a Cost Summary and Certification as required by Paragraph 96 within 90 days (or such longer period as EPA agrees) after being notified that EPA intends to terminate its obligations to make disbursements pursuant to this Section because of Respondent's failure to submit the Cost Summary and Certification as required by Paragraph 96. EPA's obligation to disburse funds from the VB/I-70 OU2 Disbursement Special Account shall also terminate upon EPA's assumption of performance of any Work pursuant to Paragraph 104 (Work Takeover) when such assumption of performance of Work is not challenged by Respondent or, if challenged, is upheld under Section XV (Dispute Resolution). Respondent may dispute EPA's determination of special account disbursements under Section XV (Dispute Resolution).

99. Recapture of Special Account Disbursements.

a. Upon termination of disbursements from the VB/I-70 OU2 Disbursement Special Account under Paragraph 98, if EPA has previously disbursed funds from the VB/I-70 OU2 Disbursement Special Account for activities specifically related to the reason for termination (e.g., discovery of a materially false or misleading submission after disbursement of funds based on that submission), EPA shall submit a bill to Respondent for those amounts already disbursed from the VB/I-70 OU2 Disbursement Special Account specifically related to the reason for termination, plus Interest on that amount covering the period from the date of disbursement of the funds by EPA to the date of repayment of the funds by Respondent. Within 90 days of receipt of EPA's bill, Respondent shall reimburse the Hazardous Substance Superfund for the total amount billed by a certified or cashier's check or checks made payable to "EPA Hazardous Substance Superfund," referencing the name and address of the party making payment, EPA Site/Spill Identification Number 089R O2, and the EPA Docket Number. Respondent shall make payment to the addresses listed in Paragraph 90b above.

b. At the time of payment, Respondent shall send notice that payment has been made to the United States, to EPA, and to the Regional Financial Management Officer, in accordance with Section X (Notices and Submissions). Upon receipt of payment, EPA may deposit all or any portion thereof in the VB/I-70 Special Account, the VB/I-70 OU2 Disbursement Special Account, or the Hazardous Substance Superfund. The determination of where to deposit or how to use the funds shall not be subject to challenge by Respondent pursuant to the dispute resolution provisions of this Settlement Agreement or in any other forum. Respondent may dispute EPA's determination as to recapture of funds pursuant to Section XV (Dispute Resolution).

100. Balance of Special Account Funds. After completion of OU2 remedial action and after EPA completes all disbursement to Respondent, if any funds remain in the VB/I-70 OU2 Disbursement Special Account, excluding any funds required for future O&M costs, EPA may transfer such funds to the VB/I-70 Special Account or to the Hazardous Substance Superfund. Any such transfer of funds to the VB/I-70 Special Account or the Hazardous Substance

Superfund shall not be subject to challenge by Respondent pursuant to the dispute resolution provisions of this Settlement Agreement.

XXI. COVENANT NOT TO SUE BY EPA

101. In consideration of the actions that will be performed and the payments that will be made by Respondent under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, EPA covenants not to sue or to take administrative action against Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and Past Response Costs and Future Response Costs paid by Respondent or ASARCO. This covenant not to sue shall take effect upon the Effective Date and is conditioned upon the complete and satisfactory performance by Respondent of all obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Section XIX (Payment of Response Costs). This covenant not to sue extends only to Respondent and Respondent's officers, and employees, and does not extend to any other person.

XXII. RESERVATIONS OF RIGHTS BY EPA

102. Except as specifically provided in this Settlement Agreement, nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.

103. The covenant not to sue set forth in Section XXI above does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:

- a. Claims based on a failure by Respondent to meet a requirement of this Settlement Agreement;
- b. Liability for costs not included within the definitions of Past Response Costs or Future Response Costs.
- c. Liability for performance of response action other than the Work;
- d. Criminal liability;
- e. Liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments; and
- f. Liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site.

104. Work Takeover. In the event EPA determines that Respondent has ceased implementation of any portion of the Work, is seriously or repeatedly deficient or late in performance of the Work, or is implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portion of the Work as EPA determines necessary. Respondent may invoke the procedures set forth in Section XV (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by EPA in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Respondent shall pay pursuant to Section XIX (Payment of Response Costs). Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXIII. COVENANT NOT TO SUE BY RESPONDENT

105. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Past or Future Response Costs, or this Settlement Agreement, including, but not limited to:

- a. Any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;
- b. Any claim arising out of the Work or arising out of the response actions for which the Past Response Costs or Future Response Costs have or will be incurred, including any claim under the United States Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or
- c. Any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Work or payment of Past Response Costs or Future Response Costs.

106. These covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Subparagraphs (b), and (d)-(f) of Paragraph 103, but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

107. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

XXIV. OTHER CLAIMS

108. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent.

109. Except as expressly provided in Section XXI (Covenant Not to Sue by EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondent or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

110. No action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

111. Except as provided in Section XXI (Covenant Not to Sue by EPA), Section XXIII (Covenant Not to Sue by Respondent), nothing in this Settlement Agreement precludes the United States or Respondent from asserting any claims, causes of action, or demands against any person not Parties to this Settlement Agreement for indemnification, contribution, or cost recovery.

XXV. CONTRIBUTION

112. a. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2), and that Respondent is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), for "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work, Past Response Costs, and Future Response Costs.

b. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which Respondents have, as of the Effective Date, resolved their liability to the United States for the Work, Past Response Costs, and Future Response Costs.

XXVI. INDEMNIFICATION

113. To the extent allowed by law, Respondent shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondent agrees to pay the United States all costs incurred by the United States, including but not limited to attorneys fees and other expenses of litigation and

settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Respondent nor any such contractor shall be considered an agent of the United States. Nothing in this Settlement Agreement waives the operation of any law limiting Respondent's ability to indemnify.

114. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.

115. Except in accord with Paragraph 89, Respondent waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site. In addition, subject to the limitations in Article XXIX, Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site.

XXVII. INSURANCE

116. Before commencing any On-Site Work under this Settlement Agreement, Respondent shall provide EPA with evidence of self-insurance or evidence of coverage required under this Settlement Agreement. Respondent shall require its Contractor performing the Work to secure and maintain for the duration of this Settlement Agreement, comprehensive general liability insurance and automobile insurance with limits of One Million Dollars (\$1,000,000), combined single limit, naming the EPA as an additional insured. Within the same period, Respondent shall require its Contractor to provide EPA with certificates of such insurance and a copy of each insurance policy. Respondent shall require its Contractor to submit such certificates and copies of policies each year on the anniversary of the Effective Date. Within 90 days of the effective date of the Settlement Agreement, Respondent shall certify to EPA in writing that Respondent's Contractor has obtained the required insurance coverage. In addition, for the duration of the Settlement Agreement, Respondent shall satisfy, or shall require its Contractor to satisfy all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Settlement Agreement. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondent need only self-insure for that portion of the insurance described above which is not maintained by such contractor or subcontractor.

117. EPA shall not be a party to any contract Respondent enters for purposes of implementing this Settlement Agreement and does not intend to be a third party beneficiary to such contracts. Respondent does not assume any liability for any injury or damages to persons or

property from acts or omissions of its employees or that of its Contractors where the acts or omissions are specifically directed by EPA or its contractors during field activities where such direction is inconsistent with the NCP.

XXVIII. FINANCIAL ASSURANCE

118. Respondent has appropriated Three Hundred Fifty-Three Thousand Dollars and No Cents (\$353,000.00) to perform Work required by this Settlement Agreement in the Respondent's fiscal year ending December 31, 2007 and Five Hundred Thousand Dollars and No Cents (\$500,000.00) for its fiscal year ending December 31, 2008. Respondent agrees to seek, in good faith, an appropriation for the cost of any Work required pursuant to this Settlement Agreement that remains to be performed in any subsequent years. If such appropriation is not approved in any subsequent City budget, Respondent shall meet its financial assurance obligation under this Settlement Agreement by providing one of the appropriate forms of financial assurances listed in 40 C.F.R. 264.143(f).

XXIX. APPROPRIATIONS AND FISCAL RESTRICTIONS

119. The City and County of Denver is a political subdivision of the State and is subject to constitutional, statutory, and charter restrictions, including limitations on incurring debt. Unless otherwise determined by judicial action, any obligation of Respondent under this Settlement Agreement, whether direct or indirect, is limited by annual appropriation of funds by Denver City Council for the purposes of this Settlement Agreement. No prior action of Denver City Council can legally restrict future actions of Denver City Council. In the event the costs to complete the obligations under this Settlement Agreement exceed funds appropriated, the Mayor of Denver or his designee shall, in good faith, seek approval for the additional funds needed to complete its obligations under this Settlement Agreement, but nothing in this Settlement Agreement commits Denver to obligate or pay funds to the United States in contravention of Article X, Section 20 or Article XI of the Constitution of Colorado.

XXX. INTEGRATION/APPENDICES

120. This Settlement Agreement, its attachments, and any deliverables, technical memoranda, specifications, schedules, documents, plans, reports (other than progress reports), etc. that will be developed pursuant to this Settlement Agreement and become incorporated into and enforceable under this Settlement Agreement constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The Parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Settlement Agreement.

121. The following documents are attached to and incorporated into this Settlement Agreement:

Exhibit A. Map of Site: Operable Unit 2 of VB/I70 site

Exhibit B. Map of the VB/I70 Superfund site: Operable Units 1, 2 and 3.

XXXI. ADMINISTRATIVE RECORD

122. EPA will determine the contents of the administrative record file for selection of the remedial action. Respondent shall submit to EPA documents developed during the course of the RI/FS upon which selection of the response action may be based. Upon request of EPA, Respondent shall provide copies of plans, task memoranda for further action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports and other reports. Upon request of EPA, Respondent shall additionally submit any previous studies conducted under state, local or other federal authorities relating to selection of the response action, and all communications between Respondent and state, local or other federal authorities concerning selection of the response action. At EPA's discretion, Respondent shall establish a community information repository at or near the Site, to house one copy of the administrative record.

XXXII. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION

123. This Settlement Agreement shall be effective upon the date that it is executed by both EPA and Respondent.

124. This Settlement Agreement may be amended by mutual agreement of EPA and Respondent. Amendments shall be in writing and shall be effective when signed by EPA. EPA Project Coordinators do not have the authority to sign amendments to the Settlement Agreement.

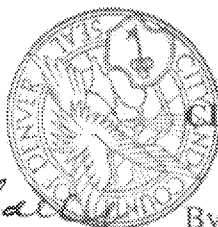
125. No informal advice, guidance, suggestion, or comment by the EPA Project Coordinator or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXXIII. NOTICE OF COMPLETION OF WORK

126. When EPA determines that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Order, including but not limited to payment of Future Response Costs or record retention, EPA will provide written notice to Respondent. If EPA determines that any such Work has not been completed in accordance with this Settlement Agreement, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the RI/FS WP/QAPP if appropriate in order to correct such deficiencies, in accordance with Paragraph 43 (Modification of the RI/FS WP/QAPP). Failure by Respondent to implement the approved modified RI/FS WP/QAPP shall be a violation of this Settlement Agreement.

For Respondent

ATTEST:



CITY AND COUNTY OF DENVER:

By: Stephanie Y. O'Malley

STEPHANIE Y. O'MALLEY, Clerk
and Recorder, Ex-Officio Clerk of the
City and County of Denver

By: [Signature]

MAYOR

RECOMMENDED AND APPROVED:

By: [Signature]

Manager, Department of Environmental
Health

APPROVED AS TO FORM:

DAVID R. FINE, City Attorney for the
City and County of Denver

By: [Signature]

Assistant City Attorney

REGISTERED AND COUNTERSIGNED:

By: [Signature]

Manager of Finance

Contract Control No. CE82144

By: [Signature]

Auditor

"CITY"

DAWN SULLEY
Deputy Auditor

It is so ORDERED AND AGREED 9/29, 2008.

BY: Sharon L Kercher
Sharon Kercher, Director
Technical Enforcement Program
Enforcement, Compliance and Environmental Justice
Region 8
U.S. Environmental Protection Agency

DATE: 9/29/08

BY: Matt Cohn
Matt Cohn, Supervisory Attorney
Legal Enforcement Program
Enforcement, Compliance and Environmental Justice
Region 8
U.S. Environmental Protection Agency

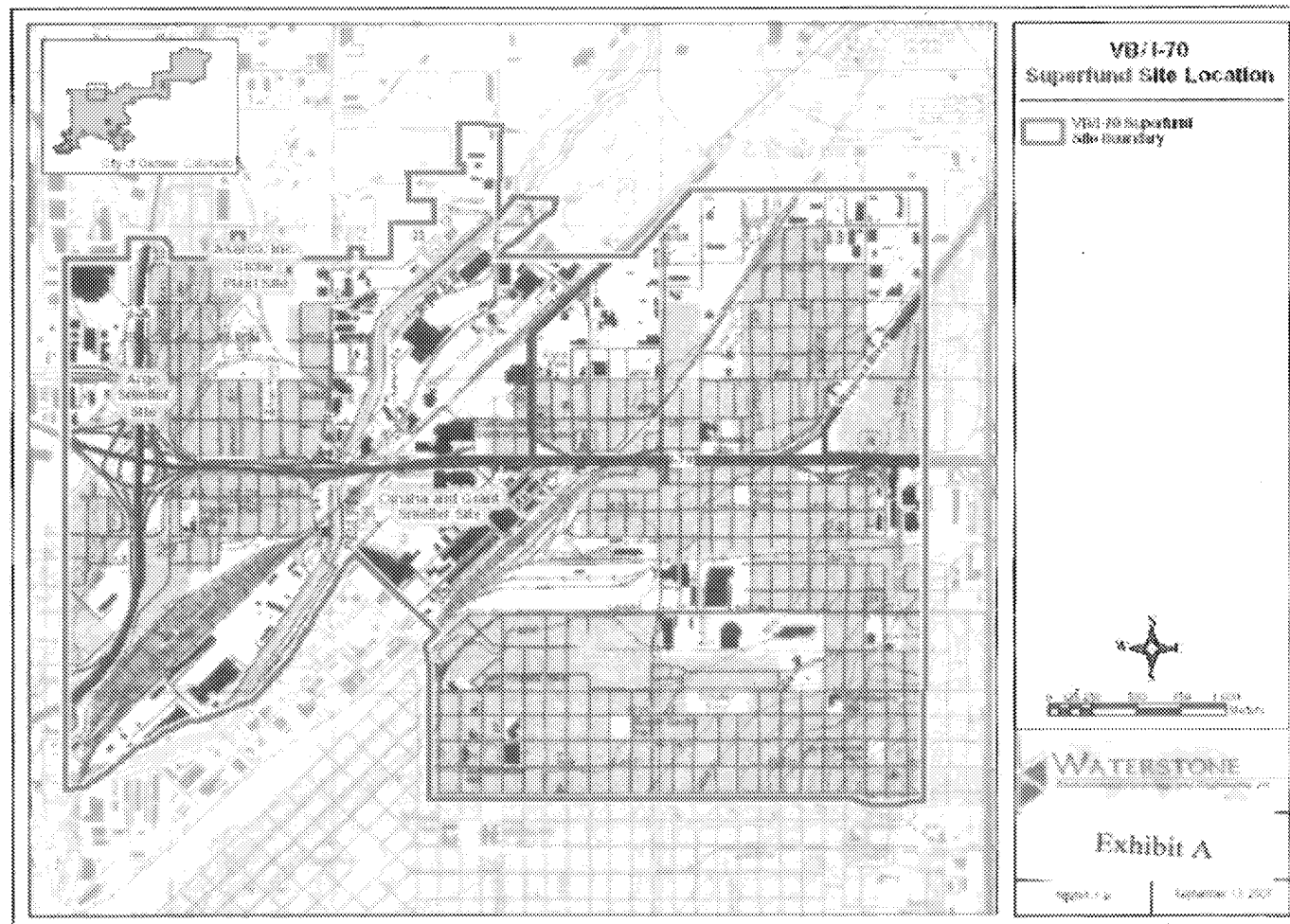
DATE: 9/29/08

BY: Bill Murray
Bill Murray, Director
Superfund Remedial Response Program
Ecosystems Protection and Remediation
Region 8
U.S. Environmental Protection Agency

DATE: 9/29/08

EFFECTIVE DATE: 9/29/08

VB/I-70 Superfund Site



VB/I-70 OU3 PROPOSED PLAN



**SETTLEMENT AGREEMENT AND
ADMINISTRATIVE ORDER ON CONSENT
FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Operable Unit No. 2**

**EXHIBIT C. STATEMENT OF WORK
REMEDIAL INVESTIGATION/FEASIBILITY STUDY**

**OMAHA & GRANT SMELTER LOCATION
(ON-FACILITY SOILS OPERABLE UNIT 2)
VASQUEZ BOULEVARD/INTERSTATE-70 SUPERFUND SITE**

September 2008

**SETTLEMENT AGREEMENT AND
ADMINISTRATIVE ORDER ON CONSENT
FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Operable Unit No. 2**

APPENDIX A. STATEMENT OF WORK

**REMEDIAL INVESTIGATION/FEASIBILITY STUDY
For the
Omaha & Grant Smelter Location
(On-Facility Soils - Operable Unit 2)
Vasquez Boulevard/Interstate-70 Superfund Site**

I. Introduction

Site Description. The Vasquez Boulevard/I-70 Superfund site is located in the northern portion of the City and County of Denver and extends north into Adams County, Colorado. It consists of 3 Operable Units (OUs): OU1 includes the residential soils contaminated with heavy metals including, but not limited to, arsenic and lead in and around the area identified in the proposed NPL listing package, which was published in the Federal Register on January 19, 1999, and all other areas where such contamination has come to be located. OU2 consists of the area identified by the Settlement Agreement and Administrative Order on Consent (Settlement Agreement) as the "Site." OU3 consists of the area in and around the historical Argo Smelter location.

II. Purpose

The purpose of this Statement of Work (SOW) is to set forth the requirements for conducting a focused Remedial Investigation/Feasibility Study (RI/FS) to assess site conditions and collect data necessary to adequately characterize the Site for the purpose of developing and evaluating effective remedial alternatives to support EPA's selection of a remedy to eliminate, reduce, or control risks to human health and the environment. This SOW is designed to provide the framework for conducting the RI/FS activities at the Vasquez Boulevard/Interstate-70 (VB/I-70) Superfund site, Omaha & Grant Smelter Location Operable Unit 2 (OU2), otherwise known as the On-Facility Soils OU2 (the Site).

III. General Requirements

1. Respondent shall conduct the RI/FS in accordance with this SOW and the primary guidance and reference material which is listed in Attachment 1. In all cases, Respondent shall use the most recent version of the relevant EPA guidance at the time a given document is prepared.

2. A summary of the deliverables and the schedule for submittals and actions is attached (Table 1) and incorporated by reference herein. Several of the submittals may be combined with others into one deliverable; however the schedule will remain the same.
3. Respondent shall furnish all necessary and appropriate personnel, materials, and services needed for, or incidental to, performing and completing the RI/FS.
4. EPA in consultation with CDPHE will provide oversight of Respondent's activities throughout the RI/FS. EPA and CDPHE review and EPA approval of deliverables will be accomplished to assure protection of public health, welfare, and the environment. EPA and CDPHE will review deliverables to assess the likelihood that the RI/FS will achieve its goals and that its performance requirements have been met. EPA in consultation with CDPHE may focus the scope of subsequent tasks based on the results of preceding tasks.

1.0 Project Planning and Support

The purpose of this task is to determine how the RI/FS will be managed and controlled. The following activities must be performed as part of the project planning task:

1.1 Project Planning

- 1.1.1 Attend Scoping Meeting. Before or concurrent with developing the RI/FS Work Plan, Respondent shall attend a scoping meeting.
- 1.1.2 Evaluate Existing Information. Respondent shall evaluate existing data and documents, including previous site investigations, Preliminary Assessment Reports, Site Inspection Reports, Hazardous Ranking System Scoring Package, and other data and documents as directed by, or received from, EPA or CDPHE. This information must be used to determine if and where any additional data are needed for RI/FS implementation and risk assessment.
- 1.1.3 Conduct Site Visit. Respondent shall conduct a Site visit with the EPA RPM and the CDPHE project manager during the project planning phase to assist in developing an understanding of the RI/FS requirements for the Site. Information gathered during the visit will be used to better scope the project and to help determine the extent of additional data necessary to implement the RI/FS.
- 1.1.4 Based on a review of data existing at the time of finalizing this SOW, EPA has determined through prior sampling that surface-water quality and sediments within the South Platte River have not been impacted by the Site and do not warrant further investigation. Likewise, the existing data confirm

that a groundwater ingestion pathway is not viable and does not require further evaluation; however, localized groundwater quality has been impacted, possibly due to localized soil conditions which will be investigated. The RI/FS will be conducted accordingly.

1.1.5 Develop Technical Project Goals and Objectives. Respondent shall prepare data needs and data quality objectives (DQOs) for analytical sampling to be performed during the RI/FS. The goals and objectives will be used to define the analytical methods and protocols, decontamination procedures, and EPA reporting levels required.

1.1.6 The requirements of paragraphs 1.1.1 through 1.1.5 were completed during the pendency of negotiations regarding this SOW in accordance with the finally executed Settlement Agreement and SOW, to the satisfaction of EPA and CDPHE.

1.2 RI/FS Quality Assurance Project Plan (QAPP)/Work Plan.

Respondent shall present the general approach that will be used for the RI/FS at a scoping meeting with EPA, CDPHE, and the VB/I-70 Working Group.

(1) Develop Narrative. The QAPP/Work Plan will include the following:

A statement of the problem(s) and potential problem(s) posed by the Site and how the objectives of the RI/FS will address the problem(s) will be presented in the narrative. A baseline summary setting forth: (1) a brief description of the Site including the geographic location and a description of the physiographic, hydrologic, hydrogeologic, geologic, demographic, ecological, cultural, and natural resource features of the Site; (2) a brief synopsis of the history of the Site including a summary of past disposal practices and a description of previous responses that have been conducted by local, State, Federal, or private parties at the Site; (3) a summary of the existing data including physical and chemical characteristics of the contaminants identified and their distribution among the environmental media at the Site.

A preliminary evaluation of potential chemical-, location-, and action-specific applicable or relevant and appropriate requirements (ARARs) will be prepared and included as part of the QAPP/Work Plan. This initial evaluation of potential ARARs will be used to guide identification of data quality objectives to be presented in the Sampling and Analysis Plan (SAP) as an attachment to the QAPP/Work Plan. The final evaluation of potential ARARs will be included in the FS report.

Respondent's technical and management approach to each task to be performed, including a description of each task; the assumptions used; the

identification of any technical uncertainties (with a proposal for the resolution of those uncertainties); the information needed for each task; any information to be produced during and at the conclusion of each task; and a description of the work products that will be submitted.

A schedule for specific dates for the start and completion of each required activity and submission of each deliverable required by this SOW. (See Table 1 for format.) This schedule must also include information about timing, initiation, and completion of all critical path milestones for each activity and deliverable and the expected review time.

- (2) The QAPP/Work Plan shall be prepared in accordance with EPA QA/R-5 (latest draft or revision). The QAPP/Work Plan must describe the project objectives and organization, functional activities, and quality assurance/quality control (QA/QC) protocols to be used to achieve the desired Data Quality Objectives (DQOs). The DQOs shall, at a minimum, reflect use of analytical methods for identifying and addressing contamination consistent with the levels for remedial action objectives identified in the National Contingency Plan. The QAPP/Work Plan will also address requirements for project management systems including tracking, storing, and retrieving data including software to be used, minimum data requirements, data format, and backup data management. It is anticipated that the Respondent will be able to use the existing OU-1 and OU-2 QAPPs with revisions, modifications or addenda as necessary to address the additional data collection activities described in the SAP.
- (3) Respondent has submitted a draft RI/FS QAPP/Work Plan, which EPA and CDPHE have reviewed. EPA and CDPHE have provided comments on the draft QAPP/Work Plan.
- (4) Final RI/FS Work Plan. Based on EPA and CDPHE comments, the Respondent revised the draft RI/FS QAPP/Work Plan and submitted a revision for EPA and CDPHE review. CDPHE did not object to the revised document which EPA approved as the final QAPP/Work Plan on 19 November 2008.

1.3 Site-Specific Plans.

Respondent shall submit the facility-specific plans listed below in subparagraphs 1.3.1 - 1.3.4 to EPA and CDPHE. After each plan has been reviewed by EPA and CDPHE, EPA will collect and review comments submitted by CDPHE and provide Respondent with EPA and CDPHE's comments. If EPA disapproves of or requires revisions to the draft plans, Respondent shall amend and submit to EPA and CDPHE a revised version of the plans that is responsive to and corrects any deficiencies identified by EPA.

- 1.3.1 Health and Safety Plan (HASP). Respondent shall submit a Site-specific HASP that specifies access, security, employee training, protective equipment, medical surveillance requirements, standard operating procedures, management responsibilities, and a contingency plan in accordance with 40 CFR 300.150 of the NCP and 29 CFR 1910.120 1(1) and (1)(2). A task-specific HASP shall also address health and safety requirements for Site visits.
- 1.3.2 Sampling and Analysis Plan. Respondent shall prepare a Sampling and Analysis Plan (SAP) that describes how sample collection, sample handling, and sample analyses will be performed. The SAP will reflect the specific objectives of data acquisition and will specify the data collection and Quality Assurance/Quality Control (QA/QC) requirements of sampling and analysis to be conducted by Respondent. The SAP will include a description of sample locations and frequency and a description of samples to be analyzed through the laboratory. The SAP may be a single document that also contains Standard Operating Procedures for the field investigations addressing sample collection, sampling equipment, and sample handling activities
- 1.3.3 Materials Management Plan. Respondent shall prepare a Materials Management Plan (MMP) that outlines how wastes encountered during the RI will be managed and disposed. Respondent shall specify the procedures to be followed when wastes will be transported off-facility for storage, treatment, or disposal.
- 1.3.4 The Respondent has submitted draft versions of the SAP, HASP and MMP to EPA and CDPHE for review. Based on EPA and CDPHE comments on these drafts, these plans were revised and final plans submitted to EPA and CDPHE. CDPHE did not object to the revised document which EPA approved as the final QAPP/Work Plan on 19 November 2008.

1.4 Project Management

Respondent, EPA and CDPHE previously developed a collaborative, consultative process for evaluation of existing data, identification of project goals and data quality objectives, and preparation of the project plans. All parties desire to continue to use this collaborative process. To that end, Respondent and EPA, in consultation with CDPHE, shall meet periodically to review and evaluate project status and performance. Respondent shall prepare a summary of each meeting which identifies the materials reviewed and documents the decisions reached and the action items identified at the meetings.

2.0 Community Relations

Respondent will be directly involved with Community Relations activities and shall provide community relations support to EPA throughout the performance of the RI/FS in accordance with *Community Relations in Superfund: A Handbook*, June 1988.

Community relations shall include the following subtasks:

- 2.1 Public Hearing, Meetings, and Availability Support - Respondent shall participate in and support and assist EPA in public hearings, meetings, and open houses. Respondent shall prepare presentation materials and provide support as needed for public meetings.
- 2.2 Technical Support - Respondent shall provide technical support for community relations. This support may include preparing technical input to news releases, briefing materials, and other community relations vehicles, and helping the EPA RPM to coordinate with local agencies.
- 2.3 Logistical and Presentation Support. Respondent may be requested to assist the EPA RPM in preparing technical briefing materials and in arranging for the logistical details for the meeting(s).
- 2.4 Public Notice Support. Respondent may be requested to assist the EPA RPM in drafting public notices, announcing public meetings, and placing the notice in a local paper of general circulation.
- 2.5 Proposed Plan Support. Respondent shall provide EPA with support and assistance during implementation of the proposed plan process.
- 2.6 Responsiveness Summary Support. Respondent shall provide EPA with support and assistance, as necessary, during preparation of the responsiveness summary.

3.0 Data Acquisition/Field Investigations

Data acquisition entails collecting environmental samples and information required to support the RI/FS. Planning for this task will be accomplished in Task 1.0 (Project Planning and Support), which will result in the plans required to collect field data. Data acquisition starts with EPA/CDPHE approval of the SAP and ends with the demobilization of field personnel and equipment from the Site.

Respondent shall perform field activities or a combination of activities for data acquisition in accordance with the EPA-approved SAP developed under Task 1.0. EPA in consultation with CDPHE may eliminate or focus the scope of these activities based on the results of the existing data evaluation.. The purpose of these field investigations is to collect information and data, consistent with the data quality objectives, to provide a

sufficient basis for EPA's remedy selection. Respondent shall perform field activities necessary to achieve the objectives of the RI, which are:

- 1) Determine the location(s) and characteristics of representative subsurface materials associated with or impacted by historical operations at the Site.
- 2) Characterize exposed surficial soils.
- 3) Assess the potential for contaminant transport from soils to other media.

Surface-water has previously been sampled and a preliminary determination has been made by EPA and the Respondent that historical or current releases of hazardous substances from the Omaha & Grant Smelter have not resulted in contamination of the sediments or surface water within the South Platte River. Therefore, absent the discovery of new or different groundwater contamination at levels that could impact surface water/sediments, no additional surface water or sediment sampling will be performed as part of implementation of this scope of work.

Groundwater has previously been sampled and a preliminary determination has been made by EPA and the Respondent that a plume of groundwater contamination does not exist at the Site. As part of the development of the draft Baseline Risk Assessment, EPA further determined that a groundwater ingestion pathway is not viable and does not require further evaluation. Therefore, additional groundwater sampling or evaluation is not required. However, there is a localized area of groundwater contamination, possibly due to localized soil conditions, that will be investigated as part of the RI/FS.

Where appropriate, field activities will be performed in a phased manner to provide EPA and CDPHE with the information necessary to focus subsequent field investigations.

3.1 Mobilization and Demobilization

Provide the necessary personnel, equipment, and materials for mobilization and demobilization to and from the Site to perform the sampling programs.

3.2 Field Investigation.

Respondent shall perform the following field investigations, as necessary.

3.2.1 Site Reconnaissance. Respondent shall conduct Site surveys to confirm the accuracy of existing information for the RI/FS. The following information will be gathered.

- (1) Property ownership and boundaries
- (2) Utility rights-of-way
- (3) Land use
- (4) Topographic mapping

3.2.2 Soil Investigations

- (1) Collect surface soil samples, where exposed
- (2) Collect representative subsurface soil samples
- (3) Collect representative exposed surface or subsurface materials samples

Based on the results of the field investigations, including sample analysis (Task 4), data validation (Task 5), and data evaluation (Task 6), EPA and CDPHE may determine whether or not additional investigations are required. Respondent shall perform the additional field investigations, if necessary.

- 3.3 Investigation-Derived Waste. Respondent shall contain, label, store, characterize, transport, and dispose of investigation-derived wastes in accordance with local, State, and Federal regulations as specified in the MMP.

4.0 Sample Analysis

Respondent shall arrange for the analysis of environmental samples collected during the field investigations. The sample analysis task begins with reserving sample slots in the laboratory and the completion of the field sampling program. This task ends with Respondent validating the analytical data received from the laboratory. Sampling and analysis requirements will be identified in the Sampling and Analysis Plan.

5.0 Analytical Support and Data Validation

Respondent shall provide EPA and CDPHE with validated analytical data in conjunction with submittal of the periodic status reports. The format of the validated analytical data will be compatible with EPA formatting requirements which will be provided by EPA prior to preparation of the SAP.

Respondent shall arrange for the validation of environmental samples collected during the field investigation. Respondent will perform appropriate data validation to ensure that the data are accurate and defensible. EPA has determined that an abbreviated (sometimes referred to as a Level III) data validation effort is sufficient for this project. An abbreviated data validation effort includes an assessment of all results reported in the standard laboratory data package exclusive of re-computation of the actual analytical results. As part of the abbreviated data validation, the following elements will be reviewed and appropriate data qualifiers will be assigned based on this review: methodology, holding times, calibration, blank sample results, spike sample results, replicate sample results and duplicate sample results. Respondent shall provide EPA and CDPHE with validated analytical data in an appropriate electronic format (e.g. computer disk), showing sample identification, medium, and results, within forty-five (45) days of receipt of the data from the laboratory.

Respondent shall perform the following activities or combination of activities to validate test results:

- 5.1 Prepare and ship environmental samples
- 5.2 Coordinate with appropriate sample-management personnel
- 5.3 Implement EPA-approved laboratory QA program
- 5.4 Provide sample management (chain-of-custody, sample retention, and data storage).

Ensure the proper management of samples. Ensure accurate chain-of-custody procedures for sample tracking, protective sample packing techniques, and proper sample-preservation techniques.

5.5 Validate Data

- 5.5.1 Review analytical results against an abbreviated (Level III) validation criteria
- 5.5.2 Provide written documentation of validation efforts

6.0 Data Evaluation

Respondent shall organize and evaluate existing data and data gathered during the previous tasks that will be used later in the RI/FS effort. Specifically, Respondent shall perform the following activities or combination of activities during the data evaluation effort:

- 6.1 Data Usability Evaluation and Field QA/QC
- 6.2 Data Reduction, Tabulation, and Evaluation.

Evaluate, interpret, and tabulate data in an appropriate presentation format for final data tables. Design and set up an appropriate database for pertinent information that will be used during the RI/FS including:

- 6.2.1 Geologic data (soils and sediments, as applicable)
- 6.2.2 Existing hydrogeologic data
- 6.2.3 Existing surface-water data
- 6.2.4 Subsurface materials data

7.0 Treatability Study and Pilot Testing

Bench- or pilot-scale testing of potential remedial technologies is not anticipated to be required to complete the RI/FS for OU2.

8.0 Remedial Investigation Report

Respondent shall develop and deliver a RI report that accurately describes the Site characteristics. Respondent shall evaluate existing data and perform field work to collect additional information/data that is necessary and sufficient to determine the key contaminant(s) movement and extent of contamination. The key contaminant(s) (i.e., lead and arsenic) have been selected based on persistence and mobility in the environment and the degree of hazard.

- 8.1 Draft RI Report. In accordance with the schedule developed in the RI/FS QAPP/Work Plan, Respondent shall submit a draft RI Report to EPA and CDPHE. After the draft RI Report has been reviewed by EPA and CDPHE, EPA and CDPHE will separately provide comments on the draft RI Report to the Respondents for review and resolution. EPA will provide direction as to which, if any, or all of CDPHE's need to be incorporated into the revised report.
 - 8.1.1 Site Background. Respondent shall assemble and review available facts about the regional conditions and conditions specific to the Site under investigation.
 - 8.1.2 Investigation. Respondent shall assemble relevant information pertaining to the field investigations (all phases) performed at the Site. Examples of such information that will be assembled are listed in Section 8.1.3.
 - 8.1.3 Site Characteristics.
 - (1) Geology
 - (2) Hydrogeology
 - (3) Meteorology
 - (4) Demographics and Land Use
 - (5) Ecological Assessment
 - 8.1.4 Nature and Extent of Contamination
 - (1) Contaminant Sources
 - (2) Contaminant Distribution and Trends
 - 8.1.5 Fate and Transport
 - (1) Contaminant Characteristics
 - (2) Transport Processes
 - (3) Contaminant Migration Trends

8.1.6 Summary and Conclusions

Appendix A – Applicable or Relevant and Appropriate Requirements: Chemical-Specific ARARs, Location-Specific ARARs and Action-Specific ARARs

8.2 Final RI Report. If EPA disapproves of or requires revisions to the draft RI Report, subject to the terms of the Settlement Agreement, Respondent shall amend and submit to EPA and CDPHE a revised version of the RI Report that is responsive and corrects any deficiencies identified by EPA.

9.0 Risk Assessment

EPA will prepare the Baseline Human Health and Ecological Risk Assessments. EPA previously prepared a draft Human Health Risk Assessment for OU2. During RI project planning activities, EPA will identify additional data necessary for completion of the Baseline Human Health and Ecological Risk Assessments for OU2. Collection of additional data that may be required for completion of the Baseline Human Health and Ecological Risk Assessments, will be included as part of the development of the Sampling and Analysis Plan and related documents (Task 1.3).

10.0 Feasibility Study Report

Respondent shall develop a focused Feasibility Study (FS) Report in accordance with 40 CFR 300.430(e). It is anticipated that conditions at OU2 will be similar to those addressed by EPA's Presumptive Remedy for Metals-in-Soil sites and therefore, the presumptive remedy approach can be used to streamline remedy selection. Consistent with the Presumptive Remedy approach, an evaluation of the potential existence of Principal Threat Wastes will be prepared and documented in the FS report to verify the applicability of the presumptive remedy approach to OU-2 and, if necessary to identify potential remedial actions that may be required in the event that principal threat wastes are identified at the Site.

10.1 Draft FS Report. In accordance with the schedule developed in the RI/FS work plan, Respondent shall submit a draft FS Report to EPA and CDPHE. After the draft FS Report has been reviewed by EPA and CDPHE, EPA and CDPHE will separately provide comments on the draft FS Report to the Respondent for review and resolution. EPA will provide direction as to which, if any, or all of CDPHE's need to be incorporated into the revised report.

The FS Report shall contain the following information:

10.1.1 Summary of Feasibility Study Objectives

10.1.2 Summary of Remedial Action Objectives (RAOs). Based on existing information, Respondent shall identify Site-specific remedial action

objectives to protect human health and the environment. The objectives shall specify the contaminant(s) and media of concern, the exposure route(s) and receptor(s), and an acceptable contaminant level or range of levels for each exposure route.

10.1.3 Development of General Response Action(s). Respondent will develop general response actions for each medium of interest by defining containment, treatment, excavation, pumping, or other actions, singly or in combination to satisfy RAOs. The response actions shall take into account requirements for protectiveness as identified in the RAOs; current and reasonably anticipated future land use; alternative land uses (to be determined at the election of the City) and the chemical and physical characteristics of the Site including locations and volumes of principal and low-level threat wastes. Consistent with the presumptive remedy approach, it is anticipated that the development of General Response Actions will be based largely on EPA's guidance for Presumptive Remedy for Metals in Soils Sites and the related nationwide Feasibility Study Analysis report.

10.1.4 Identification & Screening of Remedial Technologies. Respondent shall identify and screen technologies based on the general response actions. Consistent with the presumptive remedy approach, it is anticipated that the identification of remedial technologies will be based largely on EPA's guidance for Presumptive Remedy for Metals in Soils Sites and the related nationwide Feasibility Study Analysis report. Technologies included in the presumptive remedy are categorized according to whether or not the wastes are principal threat wastes.

10.1.5 Description of Remedial Alternatives

A listing and description of potential remedial alternatives that incorporate the applicable remedial technologies and address the RAOs will be prepared

10.1.6 Detailed Analysis of Remedial Alternatives.

The nine factors to be addressed in the detailed analysis of alternatives include

Threshold Factors

- 1) Protection of human health and the environment
- 2) Compliance with ARARs

Balancing Criteria

- 3) Long-term protectiveness and permanence
- 4) Reduction in toxicity, mobility and volume

- 5) Short-term effectiveness
- 6) Implementability
- 7) Cost

Modifying Criteria (to be address by EPA after the public comment period)

- 8) State acceptance
- 9) Community acceptance

Technical feasibility considerations shall include the study of any problems that may prevent a remedial alternative from mitigating Site problems. Specific items to be addressed are reliability, safety, operation and maintenance, ease with which the alternative can be implemented, and time needed for implementation.

The analysis shall include: (1) a technical description of each alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative; and (2) a discussion that profiles the performance of that alternative with respect to each of the evaluation criteria. Respondent shall provide a table summarizing the results of this analysis. Once the individual analysis is complete, the alternatives will be compared and contrasted to one another with respect to each of the evaluation criteria. An appendix will be prepared that identifies action, location, and chemical-specific ARARs.

10.1.7 Summary and Conclusions

- 10.2 Final FS Report. If EPA disapproves of or requires revisions to the draft FS Report, subject to the terms of the Settlement Agreement, Respondent shall amend and submit to EPA and CDPHE a revised version of the FS Report that is responsive and corrects any deficiencies identified by EPA.

Table 1. Summary of Submittals for the Remedial Investigation/Feasibility Study Vasquez Boulevard/Interstate-70 Superfund Site, Omaha & Grant Smelter Location				
TASK	DELIVERABLE	NO. OF COPIES	DUE DATE (calendar days)	EPA REVIEW PERIOD
8.1	Draft Remedial Investigation (RI) Report	4	300 days after the effective date of the AOC	45 days after receipt of draft report
8.2	Final RI Report	4	60 days after receipt of EPA comments on the draft RI report	30 days after receipt of the final report
9.1	Draft Feasibility Study Report	4	60 days after EPA approval of the RI report or 60 days after receipt of the final Baseline Risk Assessment	45 days after receipt of draft report
9.2	Final Feasibility Study Report	4	60 days after receipt of EPA comments on the draft FS report	30 days after receipt of the final report